

IN THE SPECIFICATION

On page 94, please delete the paragraph beginning on line 18 and ending on page 95, line 9, and replace with the following paragraph:

These cell lines are used to determine conditions in which a control antisense PKCa phosphorothioate oligonucleotide (GTTCTCGCTGGTGAGTTCA (SEQ ID NO:1); ISIS3521), included in STEP complexes, results in a decrease in expression of the PKCa-EGFP fusion protein. The efficacy of the oligonucleotide is first confirmed using standard antisense delivery methods (Dean *et al.*, *J Biol Chem* 269:16416-24 (1994)) to treat 60 mm dishes of normal HEK-293T cells followed by western blot analysis of PKCa protein levels. PKCa antibodies are commercially available for this purpose (Upstate Biotechnology, Inc.). Following confirmation of the efficacy of the PKCa antisense oligonucleotide, the same two-dimensional array analysis of the factors that alter transfection efficiency is employed as was utilized for plasmid DNA transfection (see Preliminary Results and Specific Aim 1A). Basically, the type of cationic lipid and protein included in the DNA complex is varied, as is the ratio of the various DNA complex components. Increased pressure enhances the effect of antisense oligonucleotides following STEP, similar to previous reports that pressure treatment increases the uptake of oligodeoxynucleotides (Mann *et al.*, *Proc Natl Acad Sci U S A* 96:6411-6 (1999)). For applying increased pressure, a small Plexiglas chamber with a sealed piston and a pressure gauge is constructed. The chamber is prewarmed to 37°C and filled with 5% CO₂. Each 10 cm tissue culture plate is treated at 1 to 3 atm pressure for 1 to 10 min, and the effect on STEP transfection efficiency is determined as described above.

On page 103, please delete Table 2, and replace with the following Table 2:

Table 2.

Selected Reporter Sequences for Functional Screening of Constitutively Active Protein Kinases

| Reporter/Sequence | Transcription Factor | Reference |
|---|----------------------|--------------------------------|
| AP-1* (TGACTCA) (<u>SEQ ID NO:2</u>) | c-fos, junB, junD | Fisch <i>et al.</i> , 1989 |
| CRE* (TGACGTCA) (<u>SEQ ID NO:3</u>) | CREB, CREM, etc. | Benbrook and Jones, |
| NF-kB*(GGGAATTCC) (<u>SEQ ID NO:4</u>) | NF-kB | 1994 |
| SRE* (60 nucleotides) | Elk-1 | Lembecher <i>et al.</i> , |
| p53* (GAAACTGAAACT) (<u>SEQ ID NO:5</u>) | p53 | 1993 |
| ISRE*(AAACTGAAACTG) (<u>SEQ ID NO:6</u>) | Stat1, Stat2, IRF | Treisman, 1990 |
| GAS*(AGTTTCATATTTACTCTAAATC) (<u>SEQ ID NO:7</u>) | Stat1 | Oh <i>et al.</i> , 2000 |
| NFAT* (GGAGGAAAAACTGTTCATACAGAAGGCGT) (<u>SEQ ID NO:8</u>) | NF-ATc; NF-ATp | Hiscott <i>et al.</i> , 1999 |
| E-box* (CACGTCCACGTC) (<u>SEQ ID NO:9</u>) | | Hiscott <i>et al.</i> , 1999 |
| E2F* (CTTGGCGGGAGATAGAA) (<u>SEQ ID NO:10</u>) | c-myc | Northrop <i>et al.</i> , 1993 |
| pRb* (60 nucleotides) | E2F-1,E2F-2,E2F-3 | |
| Ets-1 (CCAGGAAG) (<u>SEQ ID NO:11</u>) | pRb | Blackwell <i>et al.</i> , 1990 |
| Oct-1 (ATGCAAATGATAT) (<u>SEQ ID NO:12</u>) | Ets-1 | Lam <i>et al.</i> , 1995 |
| HNF3(CTAAGTCATAAT) (<u>SEQ ID NO:13</u>) | Oct-1, Oct-2 | Robbins <i>et al.</i> , 1990 |
| C/EBP ^b (tgcatATTGCGCAATctgca) (<u>SEQ ID NO:14</u>) | HNF3 | Uchijima <i>et al.</i> , 1994 |
| CTF (gccAGCCAATgagcgc) (<u>SEQ ID NO:15</u>) | C/EBP ^b | Kamps <i>et al.</i> , 1990 |
| Egr-1 (CGCCCTCGCCCCCGCGCCGG) (<u>SEQ ID NO:16</u>) | CTF-NF1 | Pani <i>et al.</i> , 1992 |
| Delta Factor | Egr-1, WT1 | Vinson <i>et al.</i> , 1993 |
| (CCCCGCTGCCATC) (<u>SEQ ID NO:17</u>) | | Altman <i>et al.</i> , 1994 |
| NF-1 | YY-1, F-ACT1, etc. | Cao <i>et al.</i> , 1990 |
| (GTTATGGCGACTATCCAGCTTGTG) (<u>SEQ ID NO:18</u>) | | |
| HSF1 (GAAacCCCTgGAAtaTTcccGAC) (<u>SEQ ID NO:19</u>) | NF-1 | Hariharan <i>et al.</i> , 1991 |
| SIE (TTCCCGTAA) (<u>SEQ ID NO:20</u>) | HSF1 | |
| | Stat1,2,3 | Hale and Braithwaite, 1995 |
| | | Abravaya <i>et al.</i> , 1991 |
| | | Boccaccio <i>et al.</i> , 1998 |